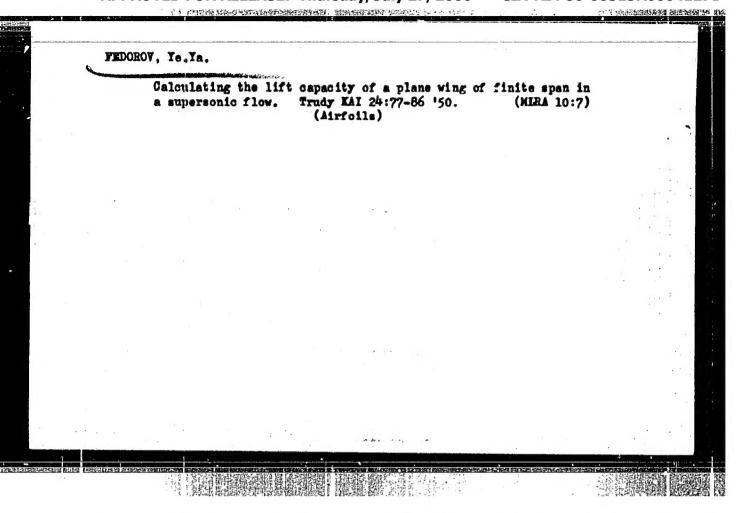
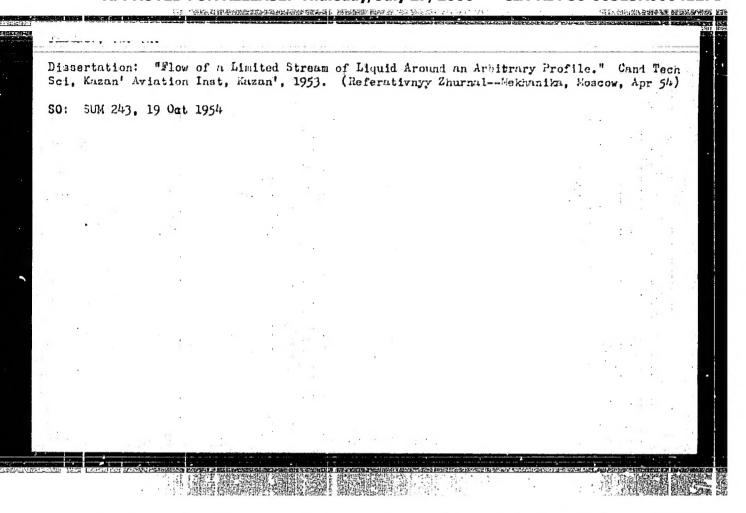
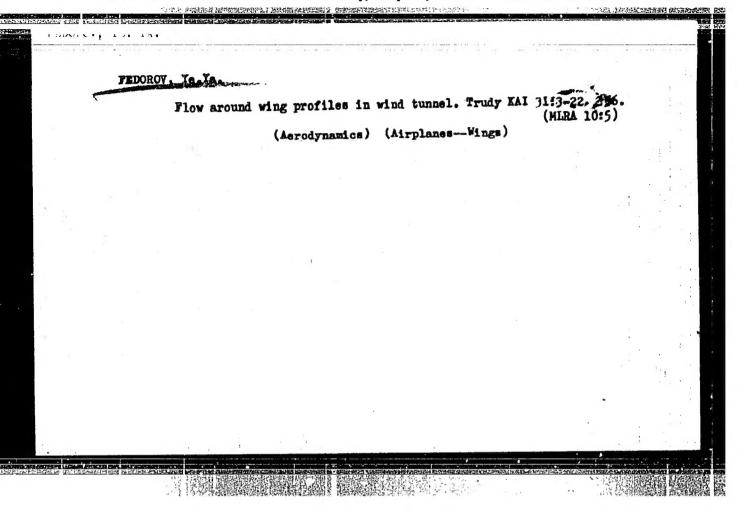


KRAKHMAL'NIKOVA, G.A.; KIRENKOV, I.I.; Prinimali uchastiye: LEYKUM, V.Ye.; FZDOROV, Ye.V.; UGOL'NIKOV, V.I.; SEMENOVA, L.I.

Spectropyrometric unit designed by the All-Union Research Institute of Metrology. Izm.tekh. no.5:18-19 My '62. (MIRA 15:6) (Pyrometers)







FEDOSENKO, R.Ya., kand. tekhn. nauk (Moskva); REYNVALD, O.A. [Reinvalds, O.]
(Riga); GNEVKO, D.G., inzh. (Minsk); ZAROZHNYY, A.M., inzh. (Minsk);
VOYTKO, A.M., inzh. (Minsk); FEDOROV, Ye.Ya., inzh. (Minsk);
AYZENBERG, B.L., doktor tekhn. nauk (Leningrad)

Protaction of closed-loop networks. Elektrichestvo no.2:
83-89 F '65. (MIRA 18:3)

"APPROVED FOR RELEASE: Thursday, July 27, 2000

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CIA-RDP86-00513R00041271

ini(2,/2st(Y)/2Wf(k)/5WF(n)/2sf(1) ACC NR AP5026736 SOURCE CODE . UR/0286/65/000/017/0012/0012 INVENTOR: Fedorov. ORG: none TITLE: A machine for winding corrugated strips onto pipes. Class 7, No. 174168 SOURCE: Byulleten; izobreteniy i tovarnykh znakov, no. 17, 1965, 12 TOPIC TAGS: pipe, metal forming machine tool wheet metal 44 ABSTRACT: This Author's Certificate introduces: 1. A machine for winding corrugated strips onto pipes to form ribs. The device includes a stand which has a holder for mounting and rotating the pipes, a shaft and a winding carriage with a device for corrugating the strip. This carriage reciprocates in the horizontal plane along the shaft. The operation of the machine is automated by installing a loading mechanism on the stand with a reloader for the blank workpieces made in the form of a hopper with inclined upper and lower guides for the blanks. The unit also contains a welder, a cutoff tool and a plate with grooves for moving the blank workpieces. These three devices are interconnected. Movable arresting devices mounted on the lower guide keep the blanks from moving during welding. The welder is made in the form of two movable electrodes, and the cutoff tool holder is mounted in the housing of one of these electrodes. 2. A modification of this machine in which the carriage is UDC: 621.774.03-418.7 Card 1/2

	ACC NR: AP5025736 equipped with gears for primary and secondary corrugations and with a step distributer mounted in the carriage housing. 3. A modification of this device with provision for simultaneous winding of several pipes by interconnection of the holders using a cross-shaped turnet mounted on the shaft of the machine.																
	SUB	CODE:	IE/	, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,		SUBM	DATE:	04 M a	r63/	ORIO	REF:	000/		отн	REF:	000	
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I EDURUI, Je. Ye.

AUTHORS:

Berengilova, V.V. and Fedorov, Ye.Ye. SOV/132-58-12-2/14

TITLE:

A New Type of Aluminum Deposits (Novyy tip mestorozhdeniy

aluminiya)

PERIODICAL:

Razvedka i okhrana nedr, 1958, Nr 12, pp 10-17 (USSR)

ABSTRACT:

The authors describe a new type of aluminum deposit discovered near the town of Kyakhta, in the Southern part of the Transbaykal region. The deposits are composed of rutile-bearing sillimanite schists from which silumin and aluminum can be extracted by the electrothermal melting process. The Kyakhta ore field is composed of a series of separate deposits, but on the whole the reserves of sillimanite-containing schists are practically unlimited. These schists also contain large reserves of ores from which, in the concentration process, rutile and pyrite can be extracted. Moreover, the sillimanite schists of the Kyakhta region are an excellent refractory, acid proof and electroceramic raw material.

Card 1/2

There are 2 sketches, 1 map, 1 table and 3 Soviet references.

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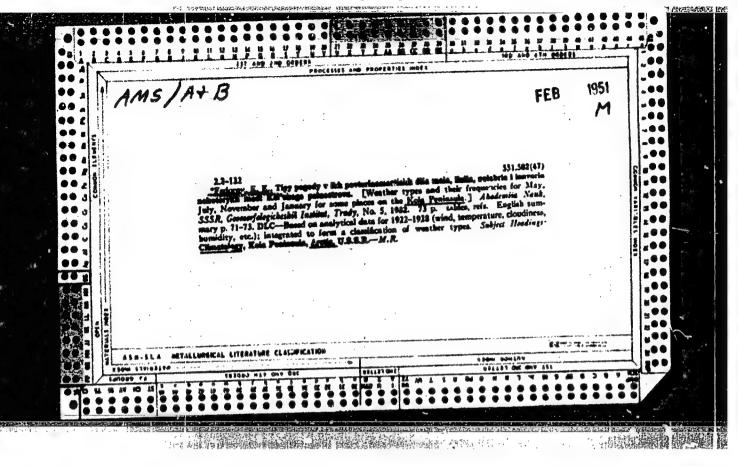
A New Type of Aluminum Deposit

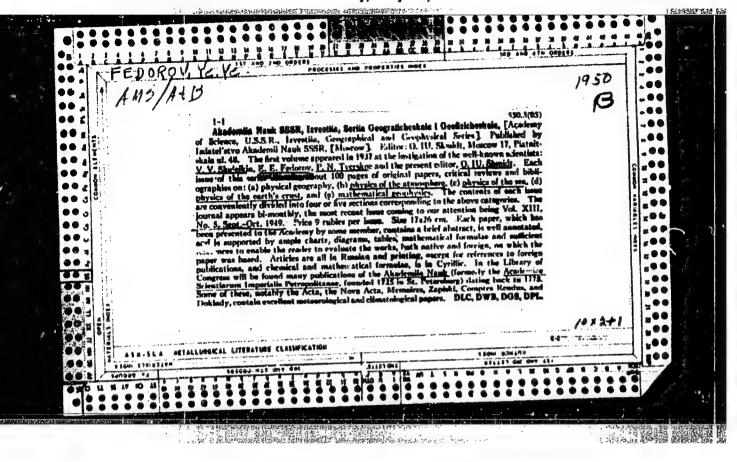
SOV/132-58-12-2/14

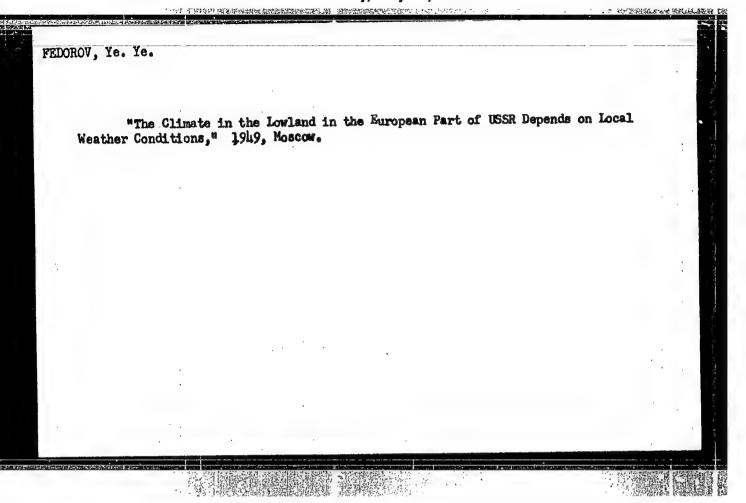
ASSOCIATION:

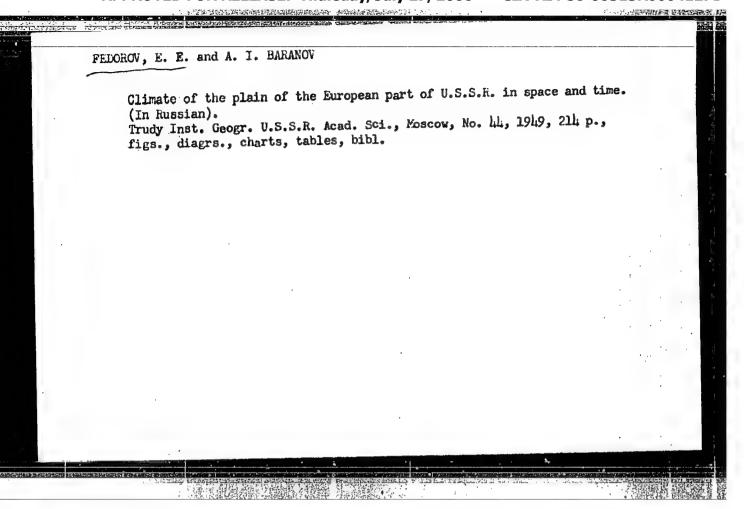
Glavgeologiya pri Sovete Ministrov RSFSR (Main Geological - Frospecting Administration, Ministers of the RSFSR)
There are 3 references, of which 2 are English and 1 is Soviet.

Card 2/2









"The Formation of Dry Weathers," Problemy Fizicheskoy Geofrafii (Problems of Physical Geography), Vol. 16, Symposium, Moscow, 1951.

U-1483, 25 Sept 51

"APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041271

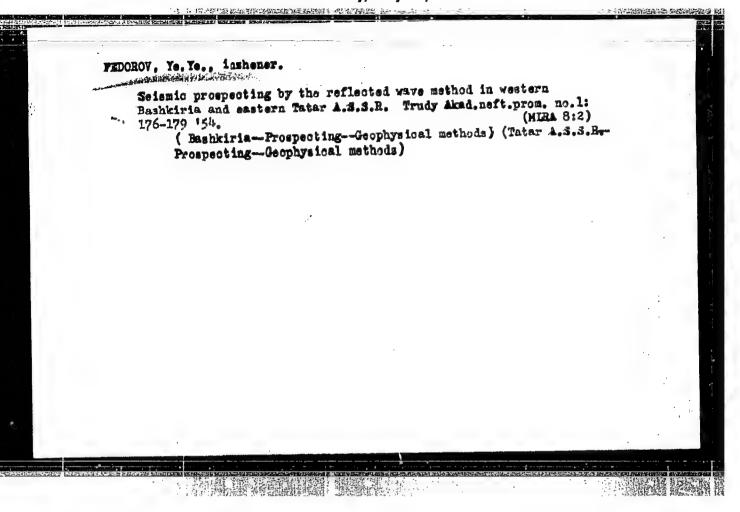
Meteorological Abst.

Vol. 4 No. 2
Feb. 1953
Aqueous Vapor and Hydrometeors

Hydrometeors

Aqueous Vapor and Hydrometeors

Aqu



FEDOROV. YRAYS, Professor; PREDTECHENSKIY, P.P.; BUCHINSKIY, I.Ye.;

SETANINOV, G.T., Professor; BOSHNO, L.V.; ALISOV, B.P.; BIRYUKOV,

N.N.; GAL'TSOV, A.P.; GRIGOR'YEV, A.A., AKEdemik; EYGENSON, M.S.,

Professor; MURETOV, H.S.; KHROMOV, S.P.; BOGDANOV, P.N.; LEHEDEY,

A.N.: SOKOLOV, V.N.; YANISHEVSKIY, YU.D.; SAMOYLENKO, V.S.; USMA--
HOV, R.F.; CHUBUKOV, L.A.; TROTSENKO, S.YA.; VANGENGEYH, G.YA.;

SOKOLOV, I.F.; STYRO, B.I.; TEMNIKOVA, N.S.; ISAYEV, E.A.; DMITRIYEV,

A.A.; HALYUGIN, Ye.A.; LIEUEMAA, Ye.K.; SAPOZHNIKOVA, S.A.; RAKIPO--
VA, L.R.; POKROVSKAYA, T.V.; BAGDASARYAN, A.B.; ORLOVA, V.V.; RU--
BINSHTEYN, Ye.S., Professor; MILEVSKIY, V.Yu.; SHCHER BAKOVA, Ye.Ya.;

BOCHKOV, A.P.; ANAPOL'SKAYA, L.Ye.; IUNAYEVA, A.V.; UTESHEV, A.S.;

HUDNEVA, A.V.; HULENKO, A.I.; ZOLOTAREV, M.A.; NERSESYAN, A.G.;

MIKHAYLOV, A.N.; GAVRILOV, V.A.; TSOMAYA, T.I.; DEVYATKOVA, A.M.;

ZAVARINA, M.V.; SHMETER, S.M.; BUDYKO, M.I., Professor.

Discussion of the report (in the form of debates) [of the current state climatological research and methods of developing it]. Inform. sbor. GUOMS no.3/4:26-154 *54. (MIRA 8:3)

l. Chlen-korrespondent Akademii nauk SSSR (for Fedorov). 2. Glavnaya geofizicheskaya observatoriya im. A.I.Voeykova (for Predtechenskiy, Letedev, Yanishevskiy, Isayev, Rakipova, Pokrovskaya, Orlova, Rubinshteyn, Budyko, Shcherbakova, Anapol'skaya, Dunayeva, Rudneva, Gavrilov, Zavarina). 3. Ukrainskiy nauchno-issledovatel'skiy gidrometeorologicheskiy institut (for Buchinskiy).

(Continued on next card)

FEDOROV, Ye.Ye., professor; PREDTECHENSKIY, P.P., and others.

Discussion of the report (in the form of debates) [of the current state climatological research and methods of developing it]. Inform. (MIRA 8:3) (Card 2) Bbor. GUGMS no.3/4:26-154 154.

4. Vsesoyuznyy institut rastenievodstva (for Selyaninov, Rudenko). 5. Bioklimaticheskaya stantsiya Kislevodsk (for Boshno). 6. Moskerskiy gosudarstvennyy universitet im. M.V. Lomonosova (for Alisov). 7. Ministerstvo puter soobshcheniya SSSR (for Biryukov). 8. Institut geografii Akademii nauk SSSR (for Gal'tsov, Grigor'yev). 9. Geofizicheskaya komissiya Vsesoyuznogo geograficheskogo obshchestva (for Eygenson). 10. Ministerstvc elektrostantsiy i elektropromysblennosti SSSR (for Muretov). 11. Leningradskiy gosudarstvennyy universitet in. A.A. Zhdenova (for Khromov). 12. Tsentral'nyy nauchno-iseledovatel'skly gidrometeorologicheskiy arkhiv (for Sokolov, Zolotarev). 13. Gosudarstvennyy okeanograficheskiy institut (for Samoylenko). 14. TSentral'nyy institut prognozov (for Usmanov, Sapozhnikova). 15. Institut geografii Akademii nauk SSSR 1 TSentral'nyy institut kurortologii (for Chubukov). 16. Nauchno-issledovatel skiy institut imeni Sechenova, Yalta (for Trotsenko). 17. Arkticheskij nauchno-issledovatel'skiy institut (for Vangengeym).

(Continued on next card)

FEDOROV, Ye.Ye., professor; PREDTECHENSKIY, P.P., and others.

Discussion of the report (in the form of debates) [of the current at a tate of climatological research and methods of developing it].

Inform.sbor. GUGMS no.3/4:26-154 *54. (Card 3) (MIRA 8:3)

18. Dal'nevostochnyy nauchno-issledovatel'skiy gidrometeorologicheskiy institut (for Sokolov). 19. Institut geologii i geografii Akademii nauk Idtovskoy SSR (for Styro). 20. Rostovskoe upravlenie gidrometelushby (for Temmikova). 21. Morskoy gidrofizicheskiy Institut Akademii nauk SSSR (for Dmitriyev). 22. Vsesoyuznyy institut rasteniyevodstva (for Malyugin). 23. Akademiya nauk Estonskoy SSR (for Bagdasaryan). (for Liedemaa). 24. Akademiya nauk Armyanskoy SSR (for Bagdasaryan). 25. Leningradskiy gidrometeorologicheskiy institut (for Milevskiy).

FEDOROV, Ye.Ye., professor; PREDTECHENSKIY, P.P., and others.

Discussion of the report (in the form of debates) [of the current state

climatological research and methods of developing it]. Inform.sbor.

GUGHS no.3/4:26-154 '54. (Card 4) (MIRA 8:3)

26. Gosudarstvennyy gidrologicheskiy institut (for Bochkov). 27. Kazakhskiy nauchno-issledovateliskiy gidrometeorologicheskiy institut (for Uteshev). 28. Upravlenie gidrometsluzhby Armyanskoy SSR (for Nersesyan). 29. Leningradskoye upravleniye gidrometsluzhby (for Mikhaylov. Devyatkova). 30. Tbilisskiy gosudarstvennyy universitet (for Tsomaya). 31. TSentralinaya aerologicheskaya observatoriya (for Shmeter). (Climatology)

FEL'DMAN, Ya.i.; CHUBUKOV, L.A.; FEDOROV, Ye.Ye., redaktor; MARGOLIN, Ya.A., redaktor; ZEMLIAKOVA, T.A., tekhnicheskiy redaktor.

[Climate of arid regions of the U.S.S.R. and ways of improving it] Klimat sasushlivykh raiomy SSSR i puti evo uluchsheniia.

Moskva, Izd-vo Akademiia nauk SSSR, 1955. 93 p (MERA 9:1)

(Russia--Climate)

BERENCILOVA, V.V.; FEDOROV, Ye.Ye.

How type of aluminum deposits. Razved 1 okh. nedr 24 no.12:10-17
D '58. (MIRA 12:1)

1.Glavgeologiya pri Sovete Ministrov RSFSR. (Kyakhta region—Sillimenite)

S/169/62/000/008/013/090 E202/E192

AUTHORS: Fed

Fedorov, Ye.Ye., and Bagdasarova, A.M.

TITLE:

Onora earthquake of July 22, 1959

PERIODICAL: Referativnyy zhurnal, Geofizika, no.8, 1962, 18, abstract 8 A 123. (Tr. Sakhalinsk. kompleksn. n.-i. in-ta, no.10, 1961, 177-181).

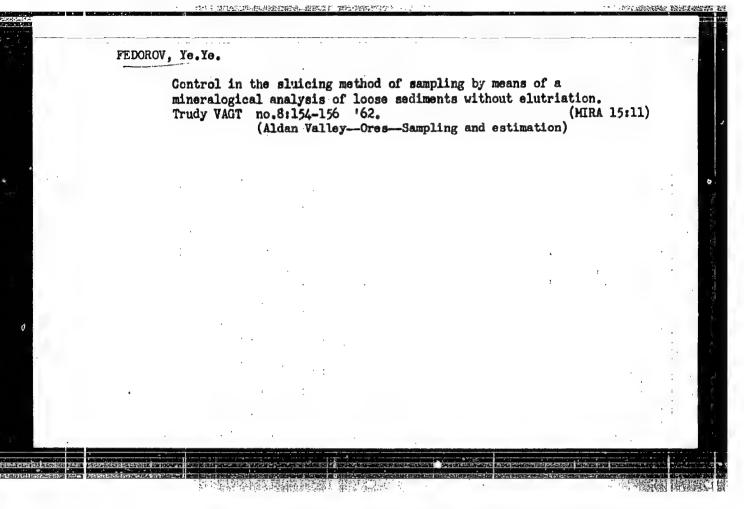
TEXT: An earthquake occurred on 22.7.59 in the region of the village Onora of the Tymovskiy Rayon, Sakhalin oblast', with a strength of 6 bal. The position of the epicentre was 50° 12' N lat., 142° 17' W long; the depth of focus was 20 km. The coordinates were plotted using four methods: epicentral, average line, hyperboles and the method of azimuth determination. The discrepancies amongst the results did not exceed 14 km. In the village Onora, in the two-storey houses 75% of the stove pipes were broken, separate walls of the stoves collapsed. In the single-storey houses 15% of the stove pipes and separate stoves collapsed. Big crarks in the walls appeared in many houses, and the window panes fell out. Buildings which found themselves in the plain Card 1/2

Onora earthquake of July 22, 1959. \$\frac{\$5/169/62/000/008/013/090}{E202/E192}\$

portion were more affected than those on the terrace. During the earthquake one could hear a rumble and thunder. The earthquake in Onora is ascribed by the authors to the lift along the fracture passing from NW to SW along which the chalk rocks of the western range were folded over the tertiary deposits of Tym'-Poronay Depression, with the plane of the fault fissure falling to the West. Photographs of the destruction, tectonic diagram and graph of the determined epicentre are given.

[Abstractor's note: Complete translation.]

Card 2/2

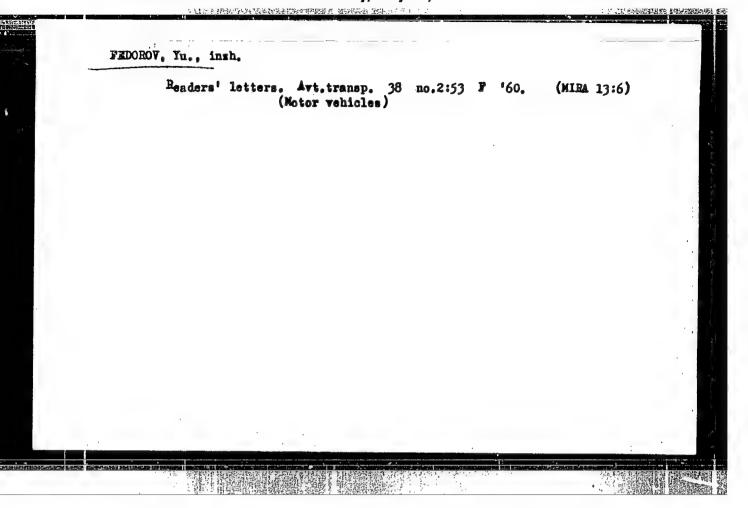


FEDOROV, Yu., insh.

By force of habit. Mast.ugl. 8 no.9:25 8 '59.

(Cheremkhovo--Mining engineering--Study and teaching)

(Cheremkhovo--Mining engineering--Study and teaching)



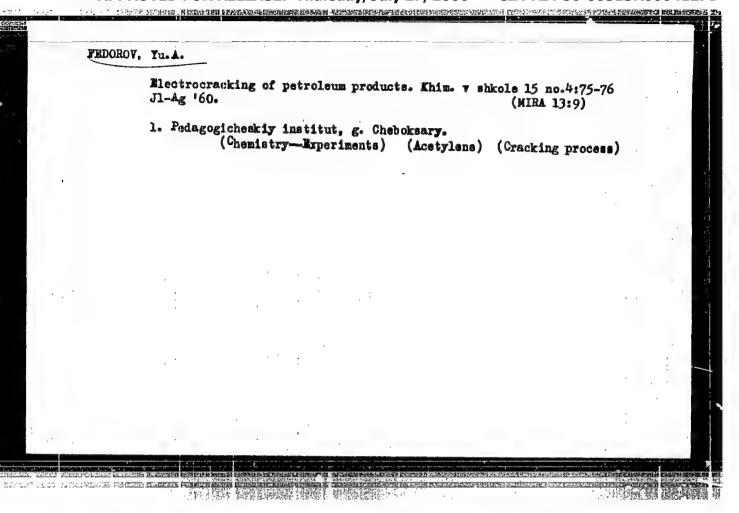
OSTAPENKO, K.; KRYKIN, A.; DUL'NEV, V.I.; OSETROV, V.S.; TOPALYAH, K.M.;

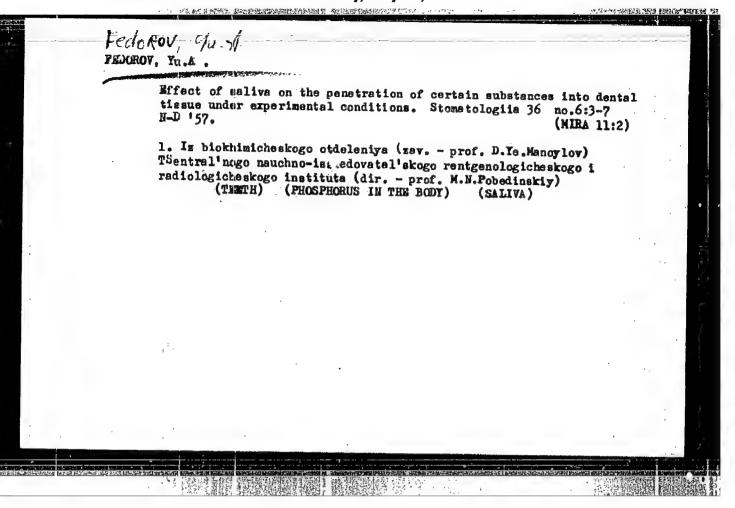
FEDOROY, Yn.; TATSYSHIN, A.I.; TITOK, V.A.; YEPIPANOV, G.;

RASTEGATEV, Yu.

Controlling little-known animal diseases. Veterinariia 42
no.8:118-124 Ag '651'

(MIRA 18:11)





FEDOROV, Yu.A.

Use of agar hydrocolloidal plastic material in dental prosthesis.

Stomatologiia 38 no.6:65-66 N-D '59. (MIRA 13:4)

1. Iz 6-y stomatologicheskoy polikliniki lechebnogo ob yedineniya khozraschetnoy seti Leningradskogo gorodskogo otdela zdravockhraneniya (glavnyy vrach L.W. Ivanova, konsul'tant ortopedicheskogo otdeleniya - kand.med.mauk Ye.D. Volova).

(DENTAL PROSTHESIS)

GAVRILOVA, V.A.; FEDOROV, Yu.A.

Case of a patient not being able to use his maxillary prosthesis. Stomatologiia 39 no.6:70 N-D '60. (MIRA 15:1)

1. Iz Vladimirskoy gorodskoy bol'nitsy No.1. (TETH, ARTIFICIAL)

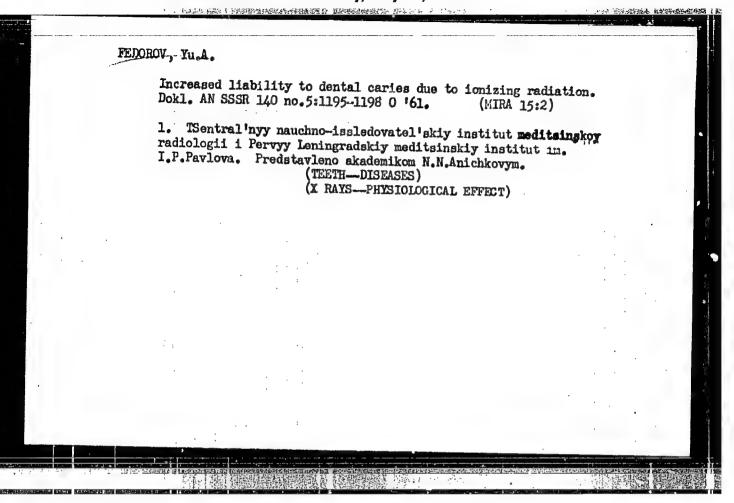
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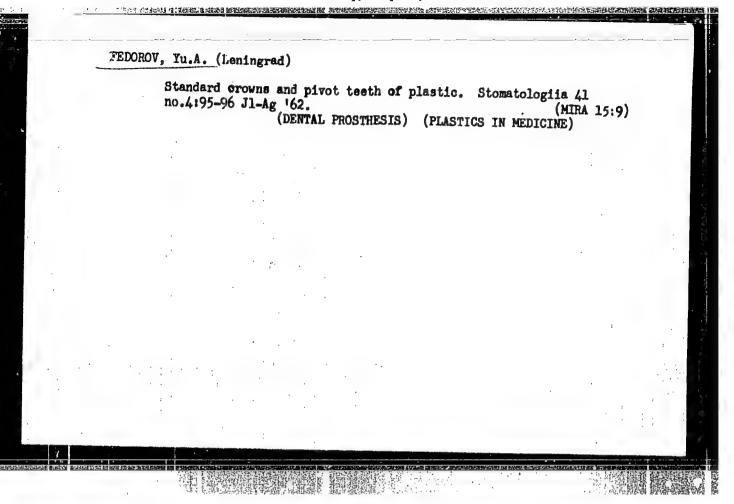
0

FEDOROV, Yu.A.

Effect of phosphorus-calcium and fluorine compounds on experimental dental caires in white rats. Dokl. AN SSSR 137 no.6:1481-1484 Ap (MIRA 14:4)

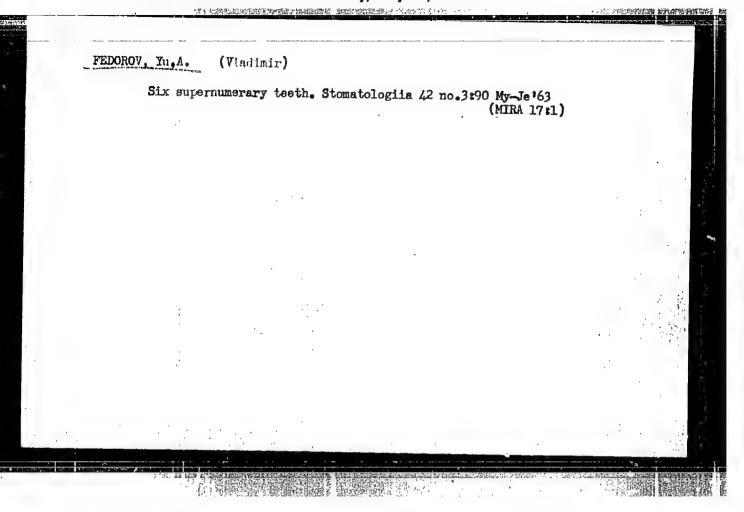
1. TSentral'nyy nauchno-issledovatel'skiy institut meditsinskoy radiologii Pervyy Leningradskiy meditsinskiy institut imeni
1.P.Pavlovu. Predstavleno akademikom N.N.Anichkovym.
(TKETH-DISEASES) (CALCIUM GLYCEROPHOS PHATE-PHYSIOLOGICAL E FFECT)
(SODIUM FLUORIDE-PHYSIOLOGICAL EFFECT)

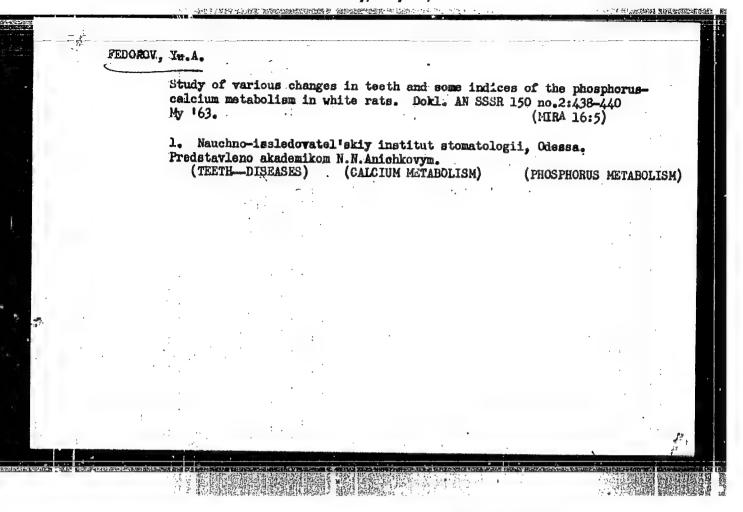




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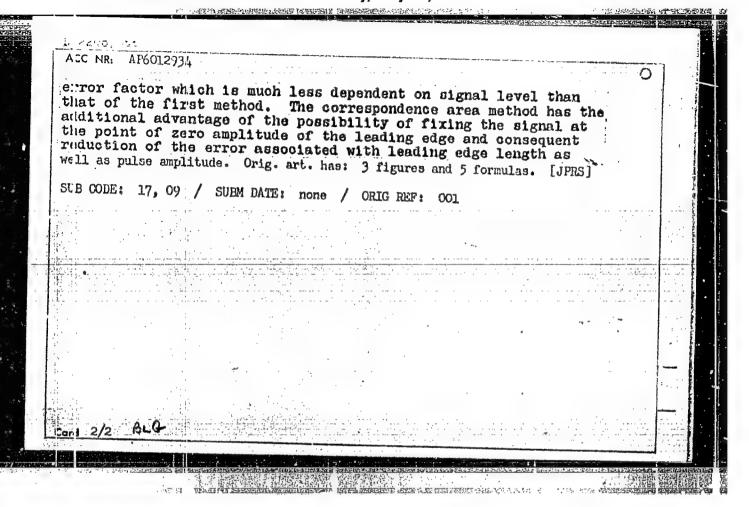




Study of the local effect of calcium glycerophosphate and sodium fluoride on the experimental dental caries in white rats. Dokl. AN SSSR 161 no.1:244-247 Mr '65. (MIRA 18:3)

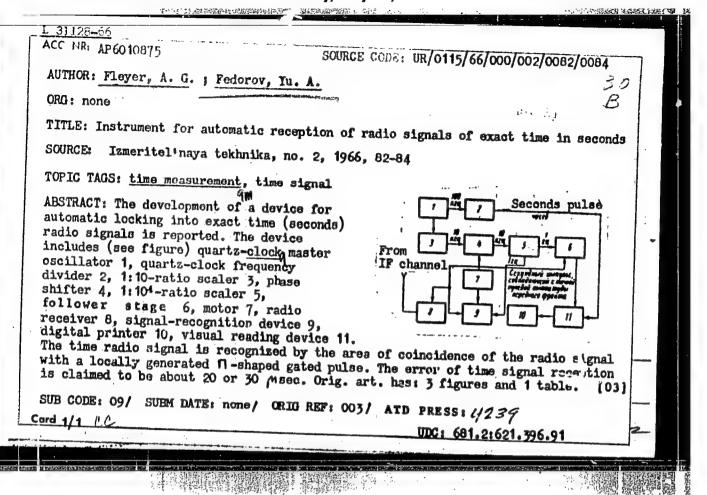
1. Nauchno-issledovatel'skiy institut stomatologii, Odessa. Submitted August 22, 1964.

CONTRACTOR OF THE PROPERTY OF 1 22087-66 ACC NR: AP6012934 SOURCE CODE: UR/0115/65/000/005/0012/0013 AUTHOR: Fleyer, A. G.; Fedorov, Yu. A. ORG: none TIME: Accuracy of automatic recording of time signals AN S DURCE: Izmeritel'naya tekhnika, no. 5, 1965, 12-13 TOPIC TAGS: servosystem, radio broadcasting, measuring instrument, time signal, signal recording The Novosibirsk State Institute of Measures and Measuring Devices has developed a device for automatic attachment to the second signals broadcast on shortwave and longwave radio. only portion of this device carrying a metering load is the electronic servosystem. The time signal in the automatic device is recorded by fixing the moment of time at which the leading edge of the time signal at the output of the radio receiver reaches a given level and by fixation of the area of correspondence of the leading edge of the time signal with a strobe impulse formed in the recording device. This article presents a comparison of these two paths from the point of view of time signal recording area resulting from changes in amplitude of the signal at the output on the radio. The results show that the second method has an



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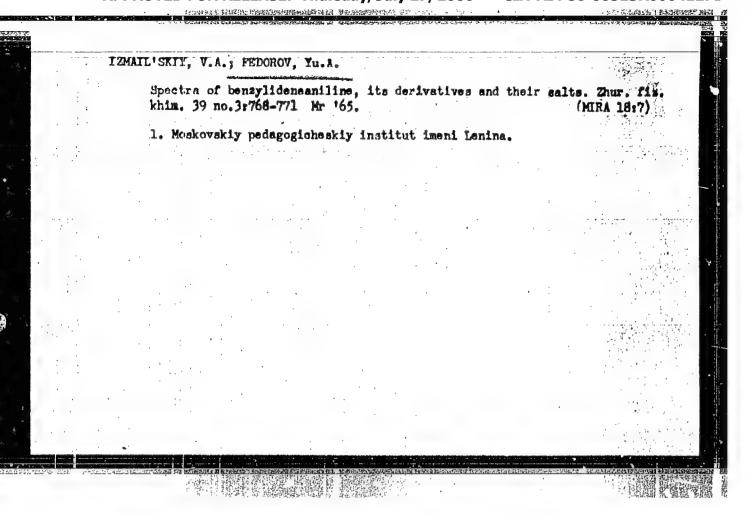
APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-

CIA-RDP86-00513R00041271(

FEDOROV, Yu.A. (Moskva) Vibrations of a closed circular cylindrical shell in a field of random acoustic pressure. Insh. zhur. 3 no.3:498-503 '63. (MIRA 16:10) 1. Institut mekhaniki AN SSSR. (Elastic plates and shells—Vibration)

Method of determining the production volume of electric welding equipment. Avtom. svar. 18 no.5:66-69 My '65. (MTRA 18:6)

1. Institut elektrosvarki im. Ye.O. Patona AN UkrSSR.



ACCESSION NR: AP4043526

8/0258/64/004/003/0525/0532

AUTHOR: Fedorov, Yu. A. (Moscow)

TITLE: On nonlinear oscillations of rectangular plates under action of random forces

SOURCE: Inshenerny y zhurnal, v. 4, no. 3, 1964, 525-532

TOPIC TAGS: nonlinear oscillation, elastic rectangular plate, varying load, ergodic function, mean square intensity, forcing function, linear differential equation, correlation function, generalized load, generalized coordinate

ABSTRACT: The nonlinear oscillations of an elastic rectangular plate (fixed at its edges) were investigated under randomly varying loads, both in time and in space. The plate vibration equations with dissipation are written in the form

$$D\Delta\Delta w - L(w, \Phi) + \rho h \frac{\partial^3 w}{\partial t^3} + 2\rho h \beta \frac{\partial w}{\partial t} - q(x, y, t)$$

$$\frac{1}{Bh} \Delta\Delta\Phi + \frac{1}{2} L(w, w) = 0$$

$$\left(L(w, \Phi) = \frac{\partial^3 w}{\partial x^3} \frac{\partial^3 \Phi}{\partial y^3} + \frac{\partial^2 w}{\partial y^4} \frac{\partial^3 \Phi}{\partial x^3} - 2 \frac{\partial^2 w}{\partial x^2} \frac{\partial^3 \Phi}{\partial x^3} \right).$$

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APPROVED FOR RELEASE: Thursday, July 27, 2000

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ACCESSION NR: AP4043526

Thickness h is assumed small compared to lateral dimensions a and b. The load q (x,y,t) is considered to be an ergodic function of time and an arbitrary function of the coordinates. A small parameter μ is defined

where q^2 is the mean square intensity. The deflection w and the forcing function Φ are then expended in power series in w_k and a set of linear differential equations are obtained in w_k and Φ_k . The equations are subsequently solved for w_k and stress σ_{xx} up to zerosth and first approximations in μ . Correlation functions are then developed for a generalized load defined by

 $Q_{mn}^{(0)}(t) = \frac{4}{abph} \int_{0}^{ab} q_{\bullet}(x, y, t) W_{mn}(x, y) dxdy$, and generalized coordinates defined

Card 2/3

ACCESSION NR: AP4043526

 $f_{min}^{(0)}(t) = \int_{-\infty}^{\infty} h_{min}(t-\theta) Q_{min}^{(0)}(\theta) d\theta,$

 $\Omega_{mn} = \sqrt{\omega_{mn}^2 - \beta^3}$

determined. From these results expressions are obtained for the mean square deflection and stress. In these formulae, terms appear which are expressed by the correlation function of the generalized coordinates, including first—and sixth—order terms and their integrals. As an example the case of plane acoustic vaves with random frequency and amplitude are analyzed, acting on a square plate. The results show that the linear theory gives a better value for the mean square stress than for mean square deflection. Orig. art. has: 34 formulas and 4

ASSOCIATION: Institute mekhaniki AN SSSR (Institute of Mechanics AN SSSR)

SUB CODE: ME, GP Cord 3/3

NO REF SOV: 002

ENCL: 00

OTHER: 002

IZMAIL'SKIY, V.A.; FEDOROV, Yu.A.

Effect of substitution of the benzene ring with a naphthalene ring in compounds having individual chromophoric systems. Zhur. VKHO 9 no. 3:359-360 '64. (MIRA 17:9)

1. Laboratoriya krasiteley i problemy tsvetnosti pri Moskovskom gosudarstvennom pedagogicheskom institute imeni Lenina.

IZMAIL'SKIY, V.A.; FEDOROV, Yu.A.

Effect of benzene nucleus substitution using naphthalene and anthracene Part.1: Absorption spectra of mono and dinitrophenylethyl Alpha-naphthylamine. Zhur. cb. khim. 34 no.12:3872-3877 D 164 (MIRA 18:1)

IZMAIL'SKIY, V.A.; FEDOROV, Yu.A.

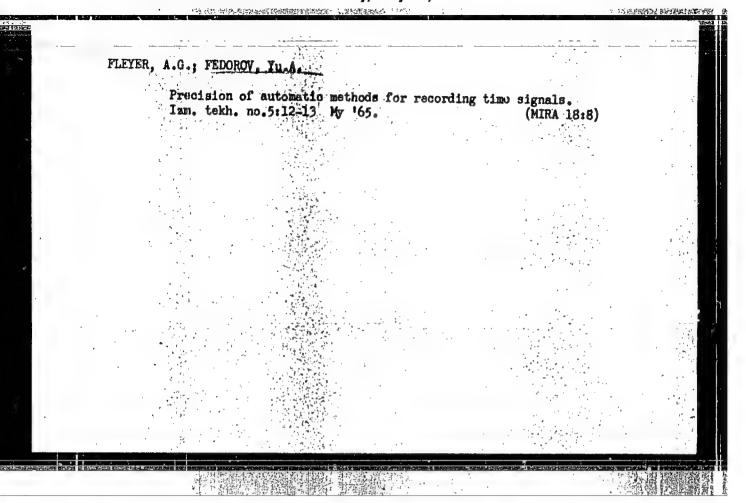
Spectrum genetics of the derivatives of benzylideneaniline and benylidene-1-naphthylamine containing NO_2 - and NMe_2 groups. Dokl. AN SSSR 158 no.4:900-903 0 164.

(MIRA 17:11)

1. Laboratoriya khimii krasiteley i problemy tsvetnosti pri

Moskovskom gosudarstvennom pedagogicheskom institute im. V.I.

Lenina.



\$/032/62/028/001/002/017 B125/B138

AUTHORS:

Zil'bershteyn, Kh. I., Kaliteyevskiy, N. I., Razumovskiy,

A. N., Fedorov, Yu. F.

TITLE:

Hollow-cathode discharge for analysis of impurities in

silicon

PERIODICAL: Zavodskaya laboratoriya, v. 28, no. 1, 1962, 43-45

The authors studied the spectrum analysis of impurities in silicon with the aid of a hollow thermionic cathode. These impurities were concentrated by treating Si powder with fluoric and nitric acid vapors on a teflon film. Teflon films with a standard and with the test specimen were put at the bottom of a hollow carbon cathode which was heated to 550°C. On complete volatilization of the teflon specimen and standard became attached to the bottom of the cathode. The spectra were taken by a hollow-cathode discharge in a helium current (10 - 15 mm Hg, discharge amperage 900 ma), using an MCT-22 (ISP-22)-spectrograph and type CTT-2(SP-2) photographic plates. The spectral lines of both the

volatile and non-volatile impurities had maximum intensity at 800 - 1000ma. Card 1/3

Hollow-cathode discharge for ...

S/032/62/028/001/002/017 B125/B138

Since the impurity elements in the teflon could not be determined accurately enough by the present method the silicon powder contained in the two half cylinders of a hollow cathode (Fig. 1) was pretreated by acid vapors. The impurity concentrate was attached to the interior of the cathode by two drops of a solution of polystyrene in benzene. Discharge in a composite hollow cathode takes place in the same way as in an ordinary one. The spectral lines of the volatile impurities Zn, Pb, In have maximum intensity at 400 - 600 ma, but remain almost constant when the amperage is further increased. Those of the less volatile impurities Fe, Ni., Mn, Mg and others have maximum intensity at 800 - 1000 ma. totality of the elements was therefore determined at 800 - 900 ma with a 2 min discharge. Screens between the cathodes prevented undesirable side effects. Under the conditions described, the absolute accuracy of quantitative analysis is 3-5-10⁻¹⁰g Ag, Mn, Cu; 6-10⁻¹⁰g Ga, In; $(3-5)\cdot 10^{-9}$ Gg Al, Ni; $(6-7)\cdot 10^{-9}$ g Mg, Fe. The accuracy of the Mg, Al, Fe, Cu determination depends on the traces of these elements in the cathode material. Reproducibility is poor. The measuring arrangement is similar to that of Yu. I. Korovin, L. V. Lipis (Optika i spektroskopiya, 5, 3, 334 Card 2/3

Hollow-cathode discharge for ...

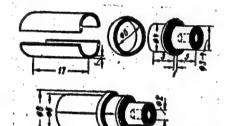
S/032/62/028/001/002/017 B125/B138

(1958)). The present paper was the subject of a lecture delivered at the soveshchaniye po spektroskopii (Conference on Spectroscopy) in July 1961 in Gor'kiy. Kh. I. Zil'bershteyn, Priryutko et al. (Zavodskaya laboratoriya, XXV, 12, 1474 (1959)) are referred to. There are 2 figures and 1 Soviet references.

ASSOCIATION: Institut khimii silikatov (Institute of Silicate Chemistry)

Fig. 1: hollow cathode used for analysis (dimensions in mm).

FIG. 1



Card 3/3

S/032/62/028/006/011/025 B101/B138

AUTHORS:

1

Zil bershteyn, Kh. I., Piryutko, M. M., Nikitina, O. N., and

Fedorov, Yu. F.

TITLE:

Techniques of the spectrochemical analysis of semiconductor

silicon

PERIODICAL: Zavodskaya laboratoriya, v. 28, no. 6, 1962, 680 - 682

TEXT: The spectrochemical analysis of semiconductor silicon already described (Zavodskaya laboratoriya, v. 25, no. 12, 1474 (1959)) is supplemented by some data. (1) The prevention of contamination of the samples during pulverization was investigated. Comparison of silicon monocrystal plates, agate, piezoquartz and leucosapphire as pulverizers monocrystal plates, agate, piezoquartz and leucosapphire as pulverizers showed that contamination by Cu, Ca, Al, Mg, Fe and Ni is prevented only with silicon monocrystals. (2) Initial crushing of the sample occurred by crushing the crystal wrapped in a ftoroplast-4 (fluoroethylene) film between ftoroplast plates in a hydraulic press. (3) The solutions of the nitrates of the elements to be investigated, used as standards, were found to remain unchanged after storage for seven months in polyethylene bottles.

Card 1/2

Techniques of the ...

S/032/62/028/006/011/025 B101/B138

(4) Spectral analysis of ftoroplast-4 and polyethylene showed that the first-named polymer contains fewer impurities (Al, Ca, Mg, Fe, Cu, Si).

(5) The preparation of thin-walled electrodes by means of a hollow-cylindrical cutter with central drill is described. The cutter grinds the electrode to 4 mm diameter and the drill makes a hole of 3.5 mm diameter.

Output of the device: 40 - 60 electrodes per hr. There are 1 figure and

ASSOCIATION: Institut khimii silikatov Akademii nauk SSSR (Institute of Silicate Chemistry of the Academy of Sciences USSR)

Card 2/2

ZIL'BERSHTEYN, Kh.I.; PIRYUTKO, M.H.; NIKITINA, O.M.; FEDOROV, Yu.F.; NENAROKOV, A.V.

Rapid chemical concentrattion of silicon in the preparation of samples for spectral analysis. Zav. lab. 29 no.10:1266-1267 '63. (MIRA 16:12)

1. Institut khimii silikatov AN SSSR.

L 2122-66 HWT(1)/EWP(e)/EWT(m)/EPF(c)/EMP(i)/EPF(n)-2/EMP(t)/EWP(b) IJP(c)
JD/WW/GG/WH

ACCESSION NE: AP5024556

UR/0070/65/010/005/0727/0731 548.0

AUTHOR: Zil'bershteyn, Kh. I.: Ioffe, V. A.; Fedorov, Yu. F.

TITLE: Electron paramagnetic resonance in Irradiated monocrystals of quartz with aluminum impurities

SOURCE: Kristallografiya, v. 10, no. 5, 1965, 727-731

TOPIC TAGS: irradiation, radiation damage, quartz, EPR, electron paramagnetic resonance, x ray

ABSTRACY: The EPR was investigated in natural and synthetic single crystals of quartz/2ontaining different amounts of aluminum impurities. Samples 6 x 4 x 2 mm were irradiated at room temperature with a dose of 104r, which was sufficient to cause saturation in all samples. The EPR spectrum (first derivative of the absorption curve) was recorded at both 77K and at room temperature (see Figs. 1 and 2 of the Enclosure). At room temperature when H | C the width of the main peak was 15.9 oe and g was 2.00; the width of the satellites was 3 oe and g was 1.97 and 2.02 oe. When the crystal was oriented in a different direction the satellites disappeared. The structure and the shape of the central peak changed, but the g-factor remained practically constant. The EPR spectrum at 77K (Fig. 2) was almost Cord 1/4

L 2122-66

ACCESSION NR: AP5024556

identical to that observed by J. H. E. Griffiths et al (Report of the Bristole Conference on Defects in Crystailine Solids, Physical Society, London, 1955, p. 51) at 20K. The group of equidistant lines was attributed to a hole center associated with aluminum and was described by the spin-Hamiltonian and the values of constants determined in the above-quoied paper by Griffiths. The maximum value of the g-factor of the second group of lines observed at 77K during rotation about the vertical axis was 2.021; the minimum value was 2.004. The nature of this signal is unknown. It was found that the intensity of the EPR signal observed at 77K decreased linearly with increasing annealing temperature, becoming zero at 350C. The color of the crystal changed in the same manner. Orig. art. has: 6 figures.

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ASSOCIATION: Institut khimii silikatov AN SSSR (Institute of the Chemistry of Silicates, AN SSSR)

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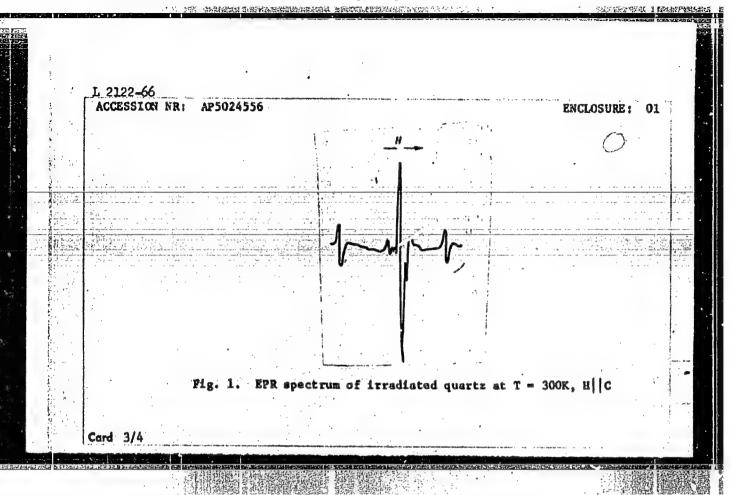
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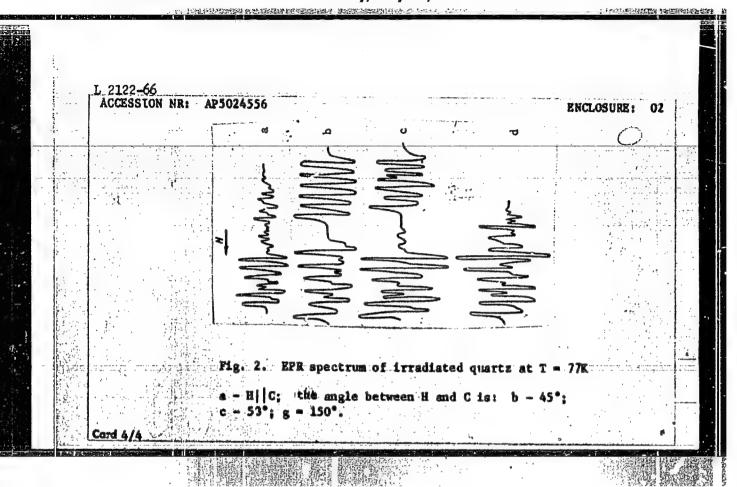
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Card 2/4





9/123/61/000/024/002/016 A004/A101

AUTHORS:

Potyagaylo, M.V., Minkov, M.A., Fedorov, Yu.G.

TITLE:

New drill design for deep-hole drilling in heat-treated steels

PERIODICAL: Referativnyy zhurnal. Mashinostroyeniye, no. 24, 1961, 53, abstract 24B329 (V sb. "Novoye v instrumental'n. proiz-ve", Leningrad, Lenizdat, 1960, 27 - 38)

The authors describe a drill for the high-speed annular drilling of TEXT: deep holes 50 - 100 mm in diameter in heat-treated alloyed steels of a hardness of HB 300-320. The drill has a capacity of up to 6.0 m/hour. The drill consists of the body and T15K6 (T15K6) sintered carbide inserts. To divide the chip over its width there are three edges at the cutting part of the insertion tool. The radial clearance of 10 mm is sufficient to remove the fine chips being washed out. The drill direction is ensured by three BK-8 (VK-8) sintered-carbide inserts. The authors present a drawing of the drill and a table of geometric parameters-which showed the most steady results during the testing. They describe the equipment of the horizontal drilling machine especially modernized for this purpose, the oil tank for the high-pressure supply and removal of the cutting

Card 1/2

New drill design for deep-hole drilling ...

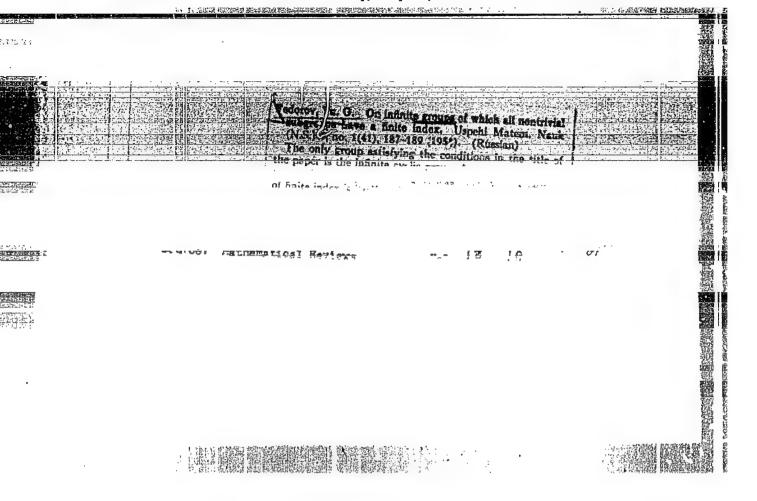
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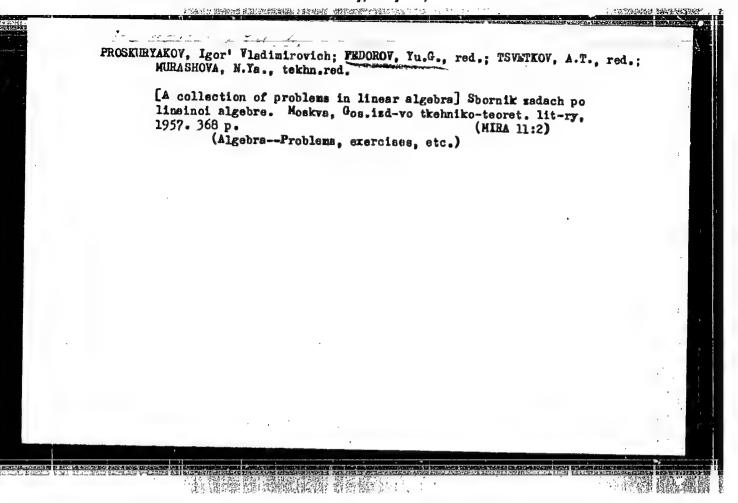
fluid and the anti-vibration bushing. The pump capacity is 200 liter/min at a pressure of 15 kg/cm². The drill life during the drilling of holes 55 mm in diameter without resharpening is 4,500 - 5,000 mm, the width of the wear chamfer at the back edge not exceeding 0.3 - 0.4 mm. The machining finishing is v 5. The cutting speed is 105 - 115 m/min; the feed 0.15 - 0.17 mm/rev. The authors give some recommendations to ensure high-efficiency drilling. There are 9 figures.

I. Briskman

[Abstracter's note: Complete translation]

Card 2/2





BOUGHER WEST SHEET STREET BEING TO THE STREET

GEL'FAND, I.M.; FYATETSKIY-SHAPIRO, I.I.; FEDOROV, Yu.G.

Determining the structure of a crystal by the nonlocal search method.
Dokl. AN SSSR 152 no.5:1045-1048 0 '63. (MIRA 16:12)

1. Chlen-korrespondent AN SSSR (for Gel'fand).

VAYNSHTEYN, B.K.; GEL'FAND, I.M.; KAYUSHINA, R.L.; FEDORGV, Yu.G.

Use of the R-factor minimalization method in determining crystal structures. Dokl. AN SSSR 153 no.1:93-96 N '63.

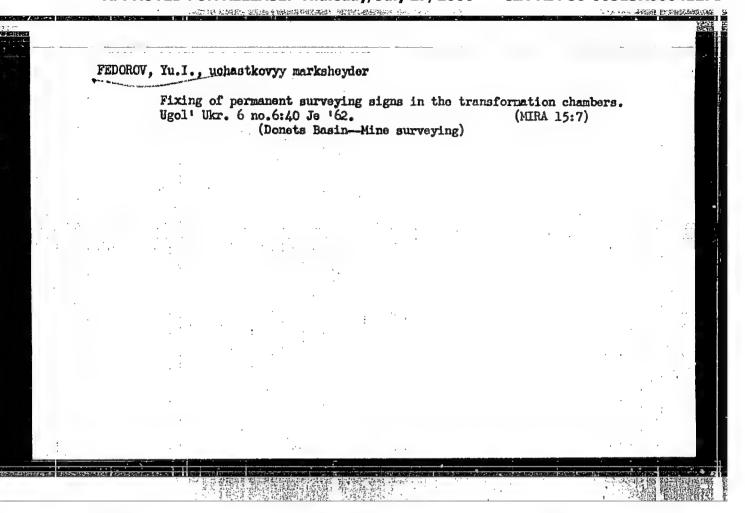
(MIRA 17:1)

1. Chleny-korrespondenty AN SSSR (for Vaynshteyn, Gel'fand).

HERESTOV, A.V. (Head District Veterinary Doctor), HERESTOV, V.A. (Candidate of Veterinary Sciences), KLYAFISHEV, I.A., SHAMMANOVA, V.I. and MAKAROV, N.V. (Veterinary Doctors), RARABOSHIN, S.A., HUCHINOV, I.N., LYAMIN, A.F., FEDOROV, Yu. I., and FILIMONOV, I. Ya. (Veterinary Medical Assistants, Ul'yanov Oblast', Terentul'sk District).

"Protein hydrolysates in dispepoia in newborn calves..."

Veterinariya, vol. 39, no. 3, March 1962 pp. 71



ANILOVICH, V.Ya., kand. tekhn. nauk; GORODETSKIY, I.M., inzh.; DYU-IN YU, inzh.; FEDOROV, Yu.I., inzh.; CHERNYAVSKIY, I.Sh.

Investigating the dynamic loads in the transmission of the T-25 (T-74) tractor during starting. Mekh. i elek. sots. sel'khos. 21 no.3:1-4 '63. (MIRA 16:8)

1. Khar'kovskiy traktornyy zavod.
(Tractors—Transmission devices)

: 3370-66 EWT(1)/EWT(m)/EWP(i)/T/EWP(t)/EWP(b)/EWA(h)/EWA(c) ACCESSION NR: AT5020496 UR/0000/64/000/000/0476/0490 AUTHORS: Fedorov, Yu. I.; Bondarenko, S. D. The standard consideration and the SS B+1 TITLE: The use of acid-resisting light-sensitive emulsions to produce local inhomogeneities with high resolution in single crystals and films of germanium and silicon SOURCE: N Mezhvuzovskaya nauchno-tekhnicheskaya konferentsiya po fizike poluprovodnikov (poverkhnostnyye i kontaktnyye yavleniya). Tomsk, 1962. Poverkhnostnyye i kontaktnyye yavleniya v poluprovodnikakh (Surface and contact phenomena in semiconductors). Tomsk, Izd-vo Tomskogo univ., 1964, 476-490 TOPIC TAGS: germanium, silicon, emulsion, semiconductor, etched crystal, ultraviolet light, photoengraving ABSTRACT: Photosensitive acid-resisting emulsions for use in photoengraving of semiconductor parts and semiconductor surfaces were synthesized and tested. Etching agents were prepared for use on germanium and silicon, films of germanium and silicon, silicon oxides, and gallium arsenide single crystals. Sensitizers that increase the sensitivity of the emulsions to ultraviolet light are indicated. Over 20 preparations-including natural colloids, organosilicon compounds, Card 1/2

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cinnamic aldehyde, emulsions based on aze and diaze compounds and polymeric polyesters—were tested. The photoengraving method consists of preparation of surfaces, application of emulsion, exposure, development, heat tanning, ultraviolet tanning, etching, and washing and drying. It was found that the esters of polyestyrene and cinnamic acid, polyvinyl alcohol, and cinnamic acid have high descript characteristics that change negligibly with time. It was also found that some of the resins that were synthesized are universal for photoengraving emulsions for the above-mentioned semiconductor materials. The sensitized emulsions that were used retained their ability to be tanned by ultraviolet rays for several months. Orig. art. has: 4 graphs, 3 photographs, 1 table, and 6 formulas.

ASSOCIATION :

and

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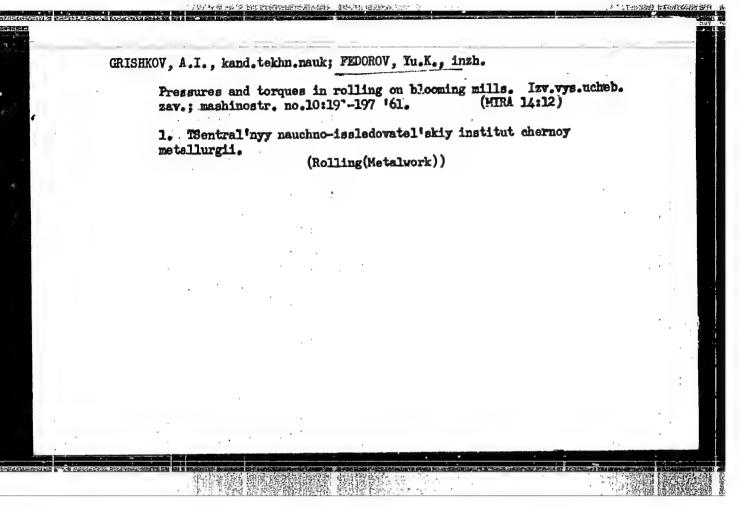
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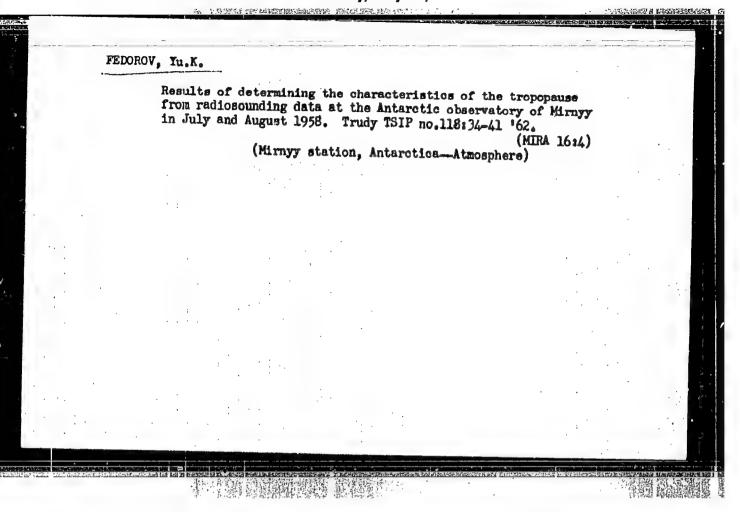
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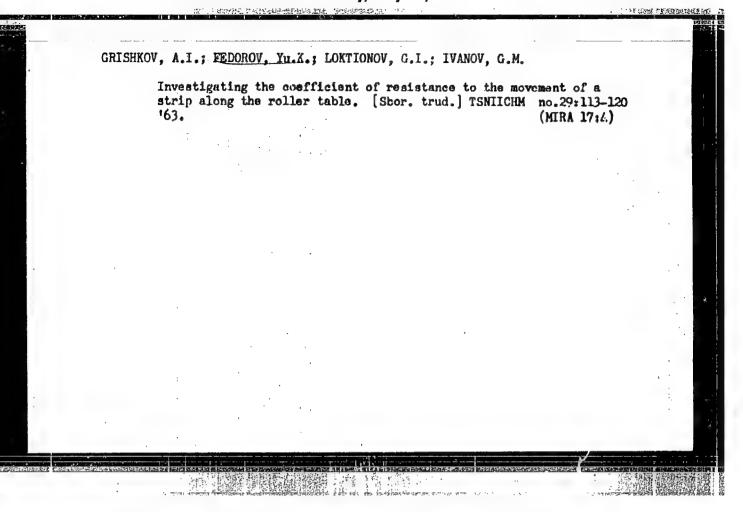


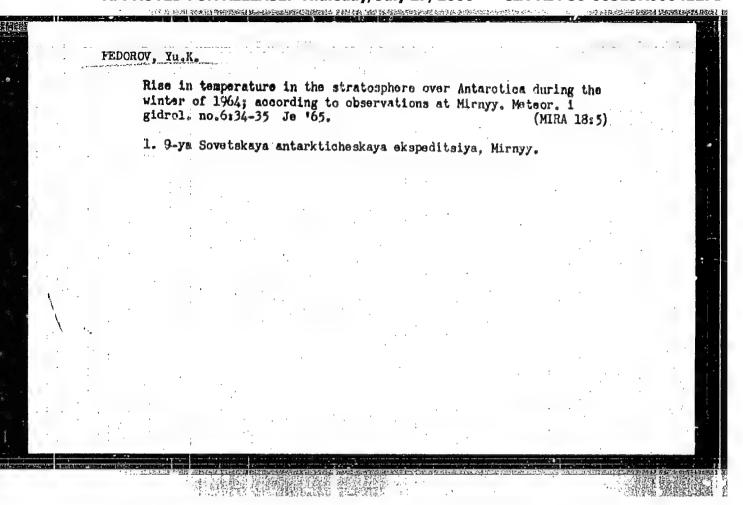
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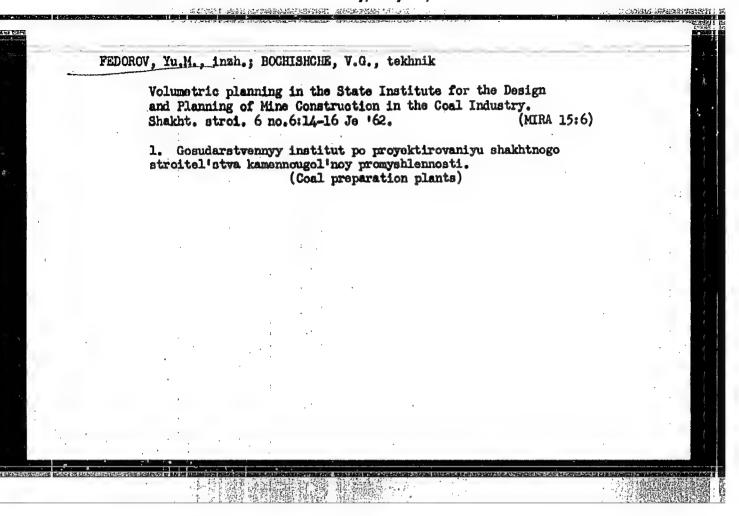




MORCZOV, V.P.; KOVALENKO, N.F.; KHLEBRIKOVA, V.N.; FEDOROV, Yu.K.

Thermodynamic properties of deuterium and tritium-substituted nonlinear triatenis hydrides. Tecret. i eksper. khim. 1 no.4: 1,62-4,67 165. (MIRA 18:10)

1. Dnepropetrovskiy khimike-tekhnologicheskiy institut.



\$/137/62/000/004/066/201 A052/A101

1.2000

Fedorov, Yu. N. Serebryakov, A. G., Kostrygina, N. A.

TITLE:

AUTHORS:

ソKハ-2 (UKL-2) automated ultrasonic unit for internal flaw detection

in sheets

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 4, 1962, 26, abstract 4D148

(V sb. "Prom. primeneniye ul'trazvuka, Kuybyshevsk. aviats. in-t".

Kuybyshev, 1961, 174-180)

The method and installation for automatic internal flaw detection TEXT: (laminations, non-metal impurities etc.) in rolled sheets are described. The described equipment is based on the shadow pulse immersion ultrasonic method. UKL-2 unit is described, and the general design scheme with the block diagram are presented. The unit is used in the industry and has the following characteristics: the tested sheet size = $1.5 - 15 \times 1,000 - 1,500 \text{ mm}$; the admissible curvature of the test sheet is up to 10 mm, the maximum weight of the test sheet = 200 kg. The speed of control is 0.2 m/min and the maximum area of the detected flaw is 25 mm².

[Abstracter's note: Complete translation]

A. Leont'yev

S/260/62/000/007/001/004 1006/1206

AUTHOR:

Fedorov, Yu. N., Serebryakov, A. G. and Kostrygina, N. A.

TITLE:

Automatized ultrashoic device УКЛ-2 (UKL-2) for sheet control against internal defects

PERIODICAL:

Referativnyy zhurnal, otdeln'yy vypusk. 40. Pribory tochnoy mekhaniki 1, i ispytatel'nyye ustanovki, v. 7, 1962, 19-20, abstract 40.7.112. From collection "Prom. primeneniye

ul'trazvuka. Kuybyshevsk. aviats. in-t". Kuybyshev, 1961, 174-180

TEXT: A device is described for the automatic control of a sheet against slight defects (dislocation, non-metallic incorporation etc.) with equivalent surface of the order of a few square millimeters. The equipment is based on the ultrasonic shadow impulse immersion method with the application of pairs of transmitting and receiving piezoelectric transducers. The sheet to be analyzed is submerged in a water bath, which provides accoustical communication between the transmitting and receiving gages situated symmetrically on both sides of the sheet. The gages are put into horizontal motion along the sheet by driving screws, the sheet remaining motionless. At every passage of the gages, 50 mm of the sheet is checked. Arriving at the end positions, the sheet moves up a pace, and this process is repeated automatically until the whole sheet is controlled. If a defect appears, sound and light signals are put in operation and the motion is stopped automatically. Approximate coordinates of the defect are evaluated following the scale. For a more exact location of the sheet defect one can use a manual gear and an electronic-light indicator. An essential diagram of the device

Card 1/2

"APPROVED FOR RELEASE: Thursday, July 27, 2000

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Automatized ultrasonic...

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is given. During the running-in of the device, a batch of 100 sheets was checked, 8 and 5 mm thick, of dimensions 1000×1000 and 550×550 mm. The minimum defect discovered was around 2.5 mm². Rate of control 0.2 m²/min. Maximum weight of analysed sheet not more than 200 kg. Maximum allowable curvature of analysed sheet not more than 10 mm.

[Abstracter's note: Complete translation.]

Card 2/2

ACCESSION NR: AT4013980

S/3070/63/000/000/0098/0100

AUTHOR: Fedorov, Yu. N.; Serebryakov, A. G.; Kostry*gina, N. A.; Tsy*ro, O. I.; Shchukin, A. I.

TITLE: The semi-automatic ultrasonic apparatus UKL-2 for inspecting sheet metal for internal defects

SOURCE: Novy*ye mashiny* i pribory* dlya ispy*taniya metallov. Sbornik statey. Moscow, Metallurgizdat, 1963, 98-100

TOPIC TAGS: sheet metal inspection, ultrasonic inspection, piezoelectric transducer, metal defect, metal sheet

ABSTRACT: For detection of internal defects (laminations, non-metallic inclusions) in sheet metal, a semi-automatic immersed ultrasonic inspection device has been developed, in which several pairs of transmitting and receiving piezoelectric transducers are used. The transmitter 4 and receiver 3 are placed symmetrically on opposite sides of the test sheet 1. (See Fig. 1 of the Enclosure.) Water is used as the immersion liquid in the test tank 1. With the aid of power-driven threaded spindles, the transmitter and receiver can be moved horizontally back and forth along the inspected sheet with a speed of 6.8 m per minute. During this movement, the sheet is stationary. At the end of each passage, the transducers 1/4

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ACCESSION NR: AT4013980

are arrested, and the sheet is raised by the width covered by inspection during one passage. At the detection of a defect, a sonic signal 6, a light signal 7, and an automatic stopping device are triggered simultaneously. The approximate coordinates of the defect can be determined by taking readings on scales. For more accurate locating of the defect, a manual drive and an electron beam indicator 9 can be used. The drive mechanisms for the sheet and the transducers are mounted on the test tank structure. Adjustment is provided for different sizes of sheets to be inspected. All automation and electronic elements are unified in one cabinet, in the upper panel of which the controls are installed. The electric scheme of the installation is described, with some simplifications but in considerable detail. The receiver and transmitter each contain ten piezoelectric transducers, 10 mm in diameter and 1 mm thick. The frequency of ultrasonic vibrations is 2.8 megacycles/sec. The circular quartz plates are arranged in two vertical rows, overlapping 40%, permitting the inspection of a 50 mm wide strip during each horizontal path. The resolving capacity of the installation was determined by examining sheet specimens with artificial defects. represented by flat bottom drillings, not fully penetrating the sheet and closed by plugs of the same material. As a result of these tests, it has been established that the minimum size of a defect detectable by the apparatus is 2.5-3 mm². However, this size depends on

Cord 2/4

ACCESSION NR: AT4013980

many factors, such as kind of defect, sheet thickness, surface condition, degree of flatness, and is 3.5-4 mm² in practice. At the present time, three UKL-2 installations are in operation at the "Krasny*y Vy*borzhets" plant in Leningrad. Orig. art. has: 3 figures.

ASSOCIATION: none

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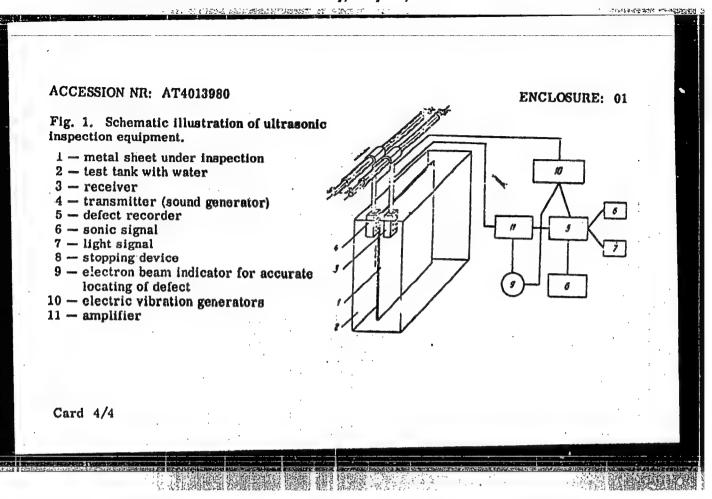
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AUTHOR: Fedorov, Mu. N.; Serebryakov, A. G.; Kostrygina, N. A.	E E
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TOPIC TAGS: ultrasonic defectorcopy, sheet material, internal defect/	lake forma-
shedow-type immersion method using several pairs of transmitting and religious a block diagram of the method is shown in Fig. 1 of the	eceiving
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cound signals are produced and the scanning is stopped automatically. The approximate coordinates of the fault are read on scales, and a more accurate determination is made manually with the aid of a cathode ray tube indicator. The

weight in 200 kg. The scanning rate is 0.2 m²/min, and the minimum defent size is 2.5 mm². Orig. art. has: 6 figures.

ASSOCIATION: None

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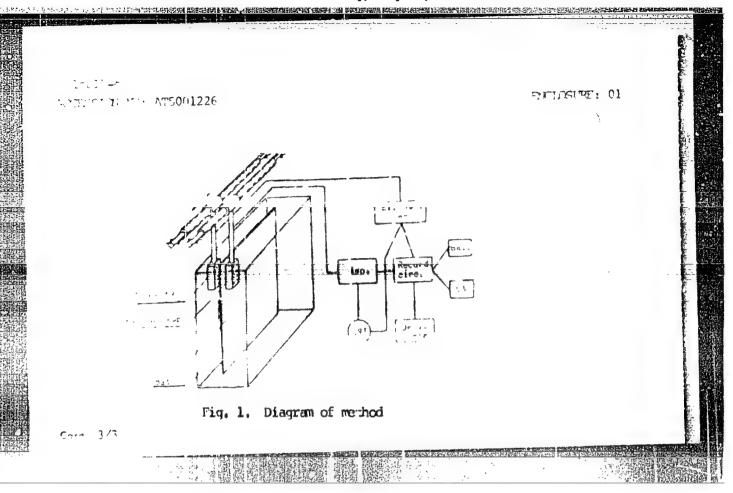
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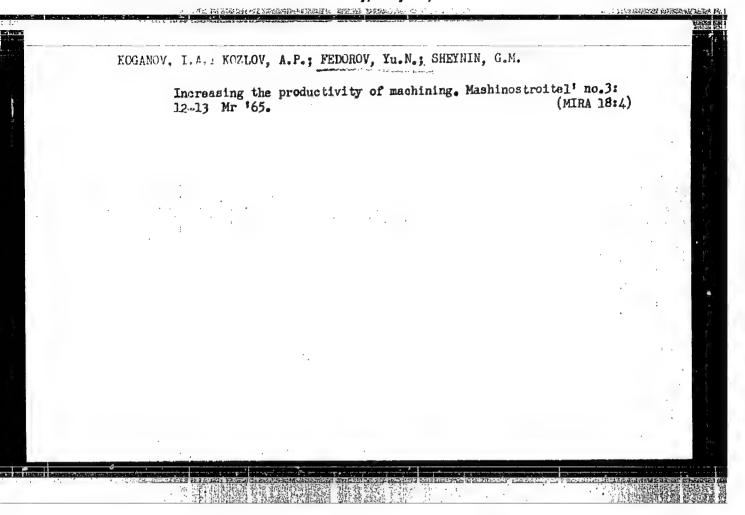
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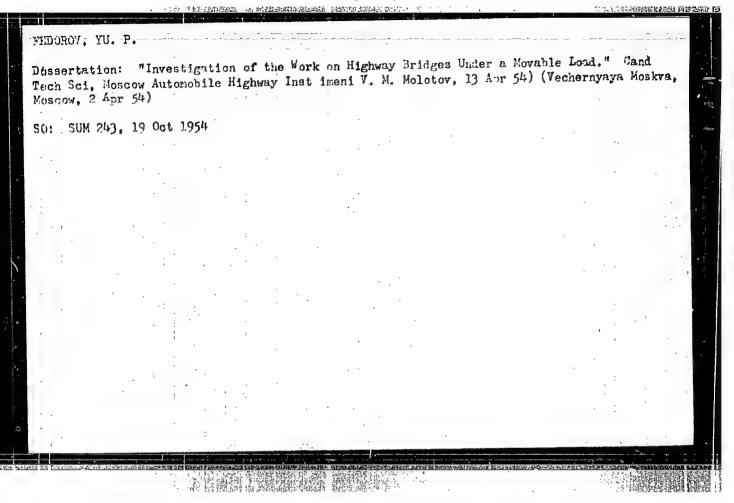
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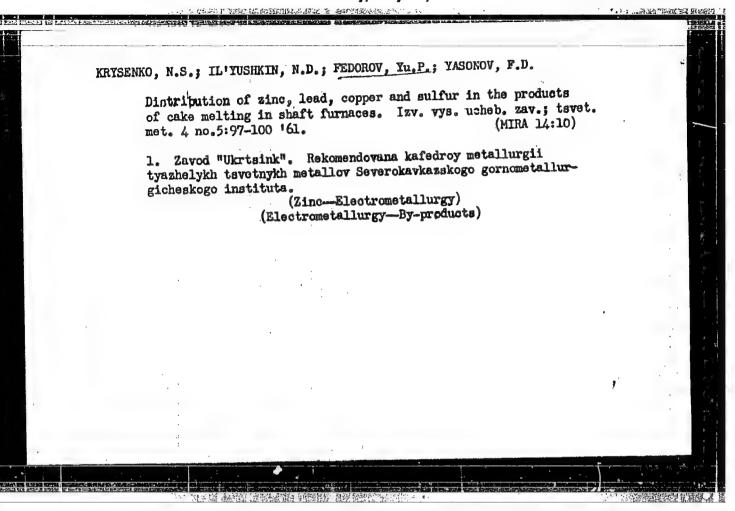


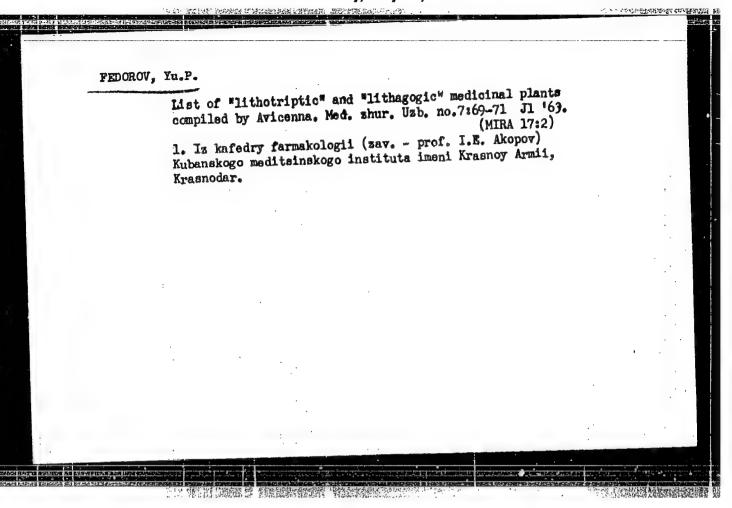
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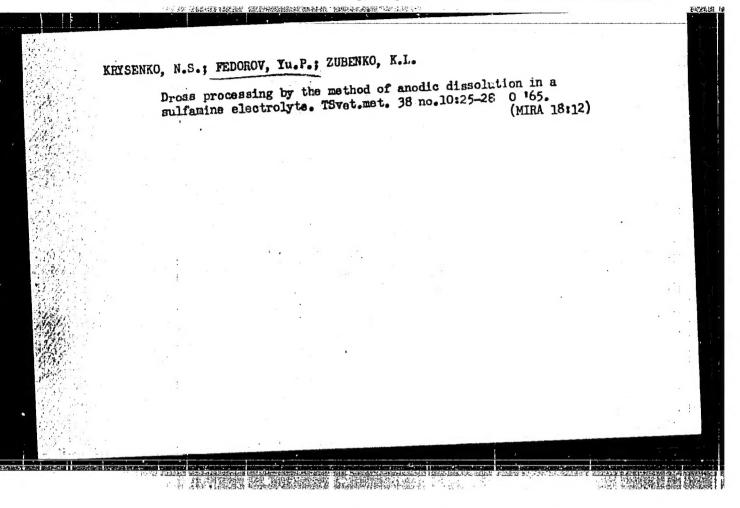






AFANAS'YEV, A.M.; YEEMOLENKO, V.A.; KISELEV, V.A.; zasl. deymtel'
nauki i tekhniki RSFSR, dcktor tekhn. neuk, prof.;
MEDNIKOV, I.A.; OVSYANNIKOVA, M.V.: SIDBODCHIKOV, A.Ya.;
TYAZHELOV, H.N.; FEDOROV, Yu.P.; I.EY, I.Yu.; DARKOV,
A.V., doktor tekhn.nauk, prof.; retsenzent; FELOROV, Yu.P.,
kand. tekhn. nauk, nauchn. red.

[Structural mechanics in examples and problems] Stroitel'naia mekhanika v primerakh i zadachskh. Moskya, Stroiizdat, 1964. 341 p. (MIRA 18:1)



SOV-127-58-8-14/27 Fedorov, Yu.S., Mining Engineer AUTHOR: Methods of Preparation and Regeneration of Heavy Suspensions (Sposoby prigotovleniya i regeneratsii tyazhelykh suspensiy) TITLE: Gornyy zhurnal, 1958, Nr 8, pp 63-65 (USSR) PERIODICAL: The author describes different heavy suspensions used at home and abroad for concentrating processes. The use of these sus-ABSTRACT: pensions simplifies the whole operation. Substances with high specific gravity are used as weighing compounds in the suspensions: magnetite, ferrosilicon, barite, galenite and others. Granulated ferrosilicon is widely used abroad, and is also prepared in the USSR by the Chelyabinskiy zavod ferrosplavov (the Chelyabinsk Plant of Ferro Alloys). To obtain the best conditions for the concentration of various ores, heavy suspensions must contain ferrosilicon with a 15% content of silicon with grain dimensions of 0.074 mm. Such ferrosi icon is not produced at the Chelyabinsk plant. The content of the weighing compound in heavy suspensions varies according to the ore to be processed. Different wetting agents are used abroad to reduce the viscosity of the suspension, when large quantities of the weighing compound are added. They are not used in the USSR. The author also describes different methods of regeneration of the suspension, when it Card 1/2

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Methods of Preparation and Regeneration of Heavy Suspensions

becomes soiled with slimes from concentrated ores. The method varies according to the composition of the suspension: magnetic separation for ferrosilicon, flotation - for galenite, separation in hydrocyclones or a combination of all three methods. There are 6 references, 3 of which are Soviet, 2 German and 1 American.

ASSOCIATION:

Institut gornogo dela AN SSSR (Institute of Mining Industry of A.S. USSR,

1. Ores--Processing 2. Ores--Flotation 3. Ores--Separation

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